

REMARKS

Claim 1 has been amended to include the features of claim 11. Claim 12 has been amended to place the claim into independent form. Applicants thank the Examiner for the courtesies he extended during the interview held on February 2, 2007. During the interview the Examiner agreed that the amendment and remarks herein appeared to overcome all of the pending rejections.

The Examiner has objected to the drawings under 37 CFR 1.83(a). Specifically, the Examiner states that the drawings fail to show the helical shape of the cam groove varying as recited in claim 12. The Examiner's attention is directed FIGs. 7A-7D, which illustrates the "second method" in which the helical shape of the cam groove 23 is appropriately adjusted. See page 22, lines 16 and 17; and page 24, line 3- page 26, line 9. Accordingly, this objection should be withdrawn.

Claim 11 and 12 stand rejected under 35 USC 112, first paragraph. With respect to claim 11 the Examiner states that "[i]f cams contact both the left and right sides of the came groove how are the cams spaced apart by different pitches as stated in claim 2, when they are installed in a fixed pitch of the cam groove."

Claim 11 has been cancelled; however, claim 1 has been amended to include the features of claim 11. As explained to the Examiner during the interview, claim 1 as amended, claims a configuration, wherein said rolling cam followers "are arranged at alternate long pitches and short pitches, the difference in length between said long pitches and said short pitches being substantially two times a gap formed between side surfaces of the cam groove and the cam followers of said drive mechanism so that said two adjacent rolling cam followers roll on said opposed inner side surfaces of said cam groove." This configuration can be explained with respect to FIGs. 6A and 6B. As shown in FIGs. 6A and 6B the cam followers 11 are arranged in alternate long pitches P1 and short pitches P2. The difference in length between said long pitches and said short pitches is

substantially two times a gap formed between side surfaces of the cam groove and the cam followers of said drive mechanism. This gap is shown as “S” in FIG. 6A. By varying the distance between the cam followers as claimed, adjacent rolling cam follower roll on opposed inner side surfaces of the cam groove (shown as 23a and 23b in FIGs. 6A and 6B). For example in FIG. 6A one cam follower is on the right hand side of the cam groove and one is on the left hand side, the cam followers are on the opposite side walls in FIG. 6B. Accordingly, the cam followers alternate which groove wall they are in contact with.

With respect to claim 12 the Examiner states that the specification does not disclose how the helical shape of the cam groove varies. As stated above, claim 12 claims a configuration as shown in FIGs. 7A-7D, and as described on page 24, line 3- page 26, line 9. As described in the specification, and as claimed, in this embodiment the pitch of the cam groove is adjusted so that “two adjacent cam followers roll on respective ones of said opposed inner sides surfaces of said cam groove.” Accordingly, the specification, and specifically the description of FIGs. 7A-7D, does describe how the cam groove varies.

Claims 1, and 11-18, stand rejected under 35 USC 112, second paragraph, as being indefinite. Specifically, the Examiner states that it is unclear what the applicant means by respective “ones.” This phrase has been removed from the claims. Accordingly, this rejection is now moot.

Claims 1, 12-14, and 17 stand rejected under 35 USC 102(b) as being anticipated by Galloway. Claim 11 stands rejected under 35 USC 103(a) as being unpatentable over Galloway in view of Parsons. Claim 15 stands rejected under 35 USC 103(a) as being unpatentable over Galloway in view of Maroth. Claim 16 stands rejected under 35 USC 103(a) as being unpatentable over Galloway in view of Kennedy. Claim 18 stands rejected under 35 USC 103(a) as being unpatentable over Galloway in view of Yanagisawa. These rejections are respectfully traversed.

As explained above, independent claim 1 has been amended to specify that the cam followers "are arranged at alternate long pitches and short pitches." In the cited references the cam followers have a constant pitch. Accordingly, the rejection of this claim should be withdrawn. In addition, claim 12 has been amended to specify that the pitch of the cam groove varies. In the cited reference, the pitch of the cam groove does not vary. Accordingly, the rejection of this claim should also be withdrawn. Since all of the remaining claims depend from claims 1 and 12, the rejection of these claims should similarly be withdrawn.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no.

371312002100.

Dated: February 22, 2007

Respectfully submitted,

By 

Jonathan Bockman

Registration No.: 45,640

MORRISON & FOERSTER LLP

1650 Tysons Blvd, Suite 300

McLean, Virginia 22102

703.760.7769